CLAIMS

1. A communication system including:

a video signal source and transmitter provided on a mobile object for generating and transmitting said video signal on at least a first carrier frequency;

at least first and second receivers for receiving said transmitted video signal on said first carrier frequency, said first and second receivers having at least partially overlapping detection areas and being located at spaced apart locations;

a position detector for generating a position signal indicative of the position of said mobile object using indications other than parameters of the received video signal and carrier;

a controller responsive to said position signal for selecting one of the video signals received by said first and second receivers and outputting said selected signal, said controller being located other than in said mobile object.

2. A system according to claim 1 wherein the controller changes from receiving the signal received by said first receiver to said second receiver when said mobile object is at a pre-determined distance from said first receiver.

3. A system according to claim 1 or 2 wherein the first and second receivers have helical antennas.

4. A system according to claim 3 wherein said antennas are arranged at a height in the range of from 1.5 to 3 metres relative to the ground.

5. A system according to any one of claims 1 to 4 wherein the transmitter can be controlled to transmit selectively on a plurality of frequencies.

6. A system according to claim 5 wherein the transmission frequency of the transmitter is controlled by the controller.

7. A system according to any one of the preceding claims wherein said position detector determines the position of said mobile object based on information provided by the timing system of a race track.

8. A system according to any one of the preceding claims comprising at least one further transmitter provided on at least one further mobile objects, each transmitter simultaneously transmitting video signals to one or more of said receivers.

9. A system according to any one of the preceding claims wherein the receivers and the controller are interconnected by a network.

10. A system according to claim 9 wherein:

the network comprises first and second signal lines;

the output of each of the receivers is selectively connectable, under the control of said controller, to the first, the second or neither of said signal lines such that, in use, the output from one of said receivers is connected to the first signal line and the output of a second one of the receivers is connected to the second signal line; and

said control means outputs the signal on the signal line connected to the

receiver receiving the desired signal.

11. A system according to claim 10 wherein the control means includes a further output connected to the signal line not connected to the desired receiver.

12. A method of communicating a video signal between a mobile object and a stationary location, the method comprising the steps of:

transmitting the video signal on a first carrier frequency from a transmitter on the mobile object;

providing at least first and second receivers at spaced apart locations for receiving the signal from the transmitter on said first carrier frequency; and

determining the location of said mobile object using indications other than signal parameters of the received signal or its carrier;

selecting the signal received by one of said first and second receivers for output at said stationary location.

13. A method of establishing a communication system for communicating a video signal between a mobile object provided with a transmitter for transmitting the video signal on a first carrier frequency and a stationary location comprising providing a plurality of receivers each having a detection area within which the receiver is able to receive the signal from the transmitter on said first carrier frequency when the transmitter is in the detection area, the method comprising the steps of:

arranging each receiver by placing a first receiver at a first location to define a

first detection area, then positioning each subsequent receiver at a distance from the previous receiver such that the detection area of the subsequent receiver overlaps with the detection area of the previous receiver to form a continuous strip within which the signal from the transmitter is receivable by at least one of the receivers, and wherein the signal received by said at least one receiver is provided to said stationary location.

14. A method of establishing a communication system according to claim 13 wherein the position of each receiver is determined by:

determining a first zone of possible positions for the receiver based on a predetermined amount of overlap of the detection areas of the current receiver and the previous receiver;

determining a subset of the first zone of possible locations for the receiver to determine a second zone of practical locations for mounting the receiver;

eliminating those locations in the second zone to define a third zone in which the detection area of the receiver does not cover all the required locations of the transmitter by considering the topology of the ground in the detection area of the receiver and any obstructions therein; and

placing the receiver in the third zone.